

ABSTRACT

An optical subassembly which positions an optical device is described. The optical device is mounted on a plurality of spheres or columns placed in predetermined positions in an upper surface of a substrate. The predetermined positions include pits formed in the upper surface of the substrate. The spheres may be the same size or may be of varying sizes. Pits or grooves also may be formed in the optical device. The optical device may be formed with flexure positions to assist in holding it in place on the spheres. Further, the optical device, spheres and substrate may be metallized or formed of metal and the surface tension forces of solder may be utilized to position the optical device.